

Take Heart II: a Modular Bayesian Decision Support System

Kevin B. Korb, Ann E. Nicholson and Lucas R. Hope

Clayton School of Information Technology
Monash University
Clayton, Victoria
Australia

Bayesian networks are a powerful technology for decision support systems. They provide a flexible platform for modeling expert knowledge and benefit from a wide range of machine learning techniques for building models from data; we can also integrate the two. However, wider adoption of the technology requires more accessible methods of presenting and interacting with them: an end-user should be exposed only to the functionality they require. Here we a prototype software tool which generates easy to use domain-specific graphical user interfaces (GUIs) based on pre-existing Bayesian networks. We illustrate the tool with Take Heart II, a prototype decision support system for assessing chronic heart disease risk factors.